

## ABSTRACT

An electronic fuse structure is disclosed for integrated circuits that is programmable with low voltage and incorporates a differential sensing scheme. The programming step is performed at about 1.5 times  $V_{dd}$  while the sense operation is performed at  $V_{dd}$ , which limits the resistance variation through the electronic fuse caused by the sense operation. During the sense operation a gating transistor emulates the voltage drop across a fuse select transistor for the case of an intact fuse. A circuit and method for characterizing the resistance of the electronic fuse is also disclosed.